Electronic Supplementary Material (ESI) for Food & Function.

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Supplementary Information

Robust and highly adaptable high internal phase gel emulsions stabilized solely by

a natural saponin hydrogelator glycyrrhizic acid

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Fig. S1 (a) Photographs of GA nanofibril solutions (0.1-2 wt%) after storage at room temperature (25 °C) for 12 h, and a transparent hydrogel is formed when the nanofibril concentration exceeds 0.25 wt%. (b and c) TEM images of a thin layer of the 0.5 wt % GA fibrillar hydrogel.

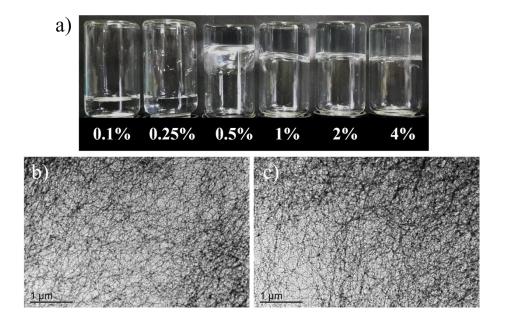


Fig. S2 (a) Photographs and (b) frequency sweeps of HIPEs with 80 vol% sunflower oil prepared at different GA nanofibril concentrations (0.1-5 wt%) after 30 days of storage at room temperature (25 °C). Filled symbols in (b) represent G' and open symbols represent G''.

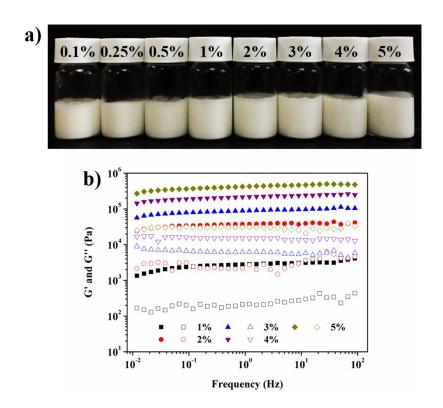


Fig. S3 Photographs of gel-HIPEs with different oil phase fractions (75-90 vol%) prepared at 5 wt% GA nanofibrils.

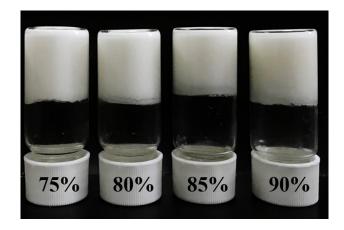


Fig. S4 Magnified CLSM images of HIPEs with 80 vol% sunflower oil prepared at different GA nanofibril concentrations: (a) 0.25 wt%, (b) 0.5 wt%, and (c) 1 wt%. All scale bars are 25 μm .

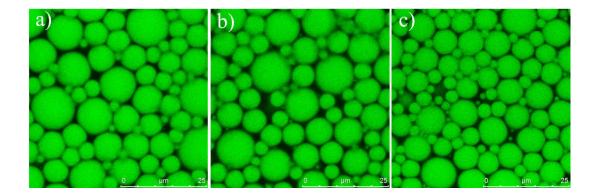


Fig. S5 FE-SEM images of freeze-dried gel-HIPEs with 80 vol% hexane prepared by 5 wt% GA nanofibrils. Scale bars: (a) 10 μ m and (b) 2 μ m.

